

WHAT IS CLAIMED IS:

1. A vehicle air conditioning unit for a vehicle including a passenger compartment, the vehicle air conditioning unit comprising:

an air duct, through which air is blown into the passenger compartment; and

a partition board, which partitions the air duct in its inside into a first air passage and a second air passage, wherein:

temperature of air in the first air passage and temperature of air in the second air passage can be separately controlled;

the air duct has a recess on its one side;

an air conditioning device is disposed in the recess; and

the partition board is deformed correspondingly to the recess so that a corresponding cross-sectional area of the first air passage and a corresponding cross-sectional area of the second air passage should be approximately equal.

2. A vehicle air conditioning unit according to claim 1 further comprising:

a first air outlet formed in the first air passage;

a second air outlet formed in the second air passage;

an air outlet switching door, which simultaneously controls openings of the first air outlet and the second air outlet; and

a drive means for driving the air outlet switching door, wherein the air conditioning device is the drive means.

3. A vehicle air conditioning unit according to claim 1 further comprising:

an evaporator disposed inside the air duct and cools air blown into the passenger compartment; and

a heater core, which is disposed inside the air duct and heats the air blown into the passenger compartment, wherein the vehicle
5 air conditioning device is one of a refrigerant piping connected to the evaporator and a hot water piping connected to the heater core.

4. A vehicle air conditioning unit according to claim 1 wherein
10 the partition board is deformed to have a substantial recess corresponding to the recess.

5. A vehicle air conditioning unit according to claim 2 wherein
15 the partition board is deformed to have a substantial recess corresponding to the recess.

6. A vehicle air conditioning unit according to claim 3 wherein
the partition board is deformed to have a substantial recess corresponding to the recess.

20 7. A vehicle air conditioning unit according to claim 1 wherein the partition board is deformed to have a stepped shape.

8. A vehicle air conditioning unit according to claim 2 wherein
25 the partition board is deformed to have a stepped shape.

9. A vehicle air conditioning unit according to claim 3 wherein

the partition board is deformed to have a stepped shape.